

Human Exposure to Radiofrequency (RF) Fields From Mobile (Vehicle - Mounted) Antenna

FCC Consumer Facts

Background

Vehicle-mounted antennas used for cellular communications normally operate at a power level of 3 watts or less. These cellular antennas are typically mounted on the roof, trunk, or rear window of a car or truck.

Results of Studies

Studies show that, in order to be exposed to RF levels that approach the safety limits adopted by the FCC, it would be necessary to remain very close to a vehicle-mounted cellular antenna for a significant amount of time. Studies have also shown that the metal body of the vehicle can effectively shield occupants. Proper installation of a vehicle-mounted antenna to maximize this shielding effect is a good way to minimize exposure. Some companies recommend that antennas be installed either in the center of the roof or center of the trunk of a vehicle. In response to concerns expressed over the commonly used rear-window mounted cellular antennas, a minimum separation distance of 1-2 feet has been suggested as a way to minimize exposure to vehicle occupants.

Conclusions/Recommendations

From data gathered to date, properly-installed, vehicle-mounted, personal wireless transceivers using up to 3 watts of power result in maximum exposure levels in or near the vehicle that are typically well below the FCC's safety limits, assuming that the transmitting antenna is 6 inches or more from vehicle occupants.

For further information on this topic or for general information on other telecommunication-related issues, refer to the Web sites at www.fcc.gov/cgb or www.fcc.gov/oet/rfsafety.

You may also contact the FCC's Consumer & Governmental Affairs Bureau in the following ways:

E-mail: fccinfo@fcc.gov

Telephone: 1-888-CALL-FCC

(1-888-225-5322) voice;

1-888-TELL-FCC (1-888-835-5322) TTY

OET's RF Safety Line: 202-418-2464

Postal Mail: Federal Communications Commission

445 12th Street, SW

Washington, DC 20554

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For this or any other consumer publication in an alternative format (electronic ASCII text, Braille, large print, or audio), please write or call us at the address or phone number below, or send an e-mail to FCC504@fcc.gov.

To receive information on this and other FCC consumer topics through the Commission's electronic subscriber service, click on <http://www.fcc.gov/cgb/contacts/>.

This fact sheet is for consumer education purposes only and is not intended to affect any proceeding or cases involving this subject matter or related issues.

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Federal Communications Commission ■ Consumer & Governmental Affairs Bureau ■ 445 12th St., SW ■ Washington, DC 20554
1-888-CALL-FCC (1-888-225-5322) ■ TTY: 1-888-TELL-FCC (1-888-835-5322) ■ Fax: 1-866-418-0232 ■ www.fcc.gov/cgb